

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-29. (canceled)

30. (Previously Presented) A method for positioning an apparatus for measuring flow in a lumen defined by a conduit with an outer diameter and cross sectional shape, comprising:

selecting a coupling member, the coupling member conforming to the outer diameter and the cross sectional shape of the conduit;

assembling the coupling member and a sensor housing; and

positioning the coupling member and sensor housing adjacent the conduit.

31. (Original) The method of claim 30, further comprising:

selecting a closure mechanism, the closure mechanism conforming to the outer diameter and cross sectional shape of the conduit; and

attaching the closure mechanism to the coupling member to encircle the conduit.

32. (Previously Presented) The method of claim 31, further comprising:

positioning the coupling member using a positioning tool.

33. (Previously Presented) The method of claim 30, further comprising:

positioning the coupling member using a positioning tool.

34-40. (Canceled)

41. (Previously Presented) A method for positioning an implantable flow probe for measuring blood flow through a blood vessel, comprising:

aligning the implantable flow probe in a desired position with respect to the blood vessel; and

adjusting a size of the probe to achieve a close fit with the blood vessel to hold the flow probe in the desired position with respect to the blood vessel.

42. (Previously Presented) The method of claim 41, wherein adjusting a size of the probe includes changing a diameter of the probe to a diameter of the blood vessel.

43. (Previously Presented) The method of claim 41, wherein aligning the implantable flow probe in a desired position with respect to the blood vessel and adjusting a size of the probe to achieve a close fit with the blood vessel to hold the flow probe in the desired position with respect to the blood vessel includes:

adjusting the size of the probe to partially encircle an exterior of the blood vessel and achieve a close fit with the blood vessel; and

aligning the implantable flow probe in a desired position with respect to the exterior of the blood vessel.

44. (Previously Presented) The method of claim 41, wherein the probe includes a sensor housing, a coupling member and a closure mechanism, and wherein aligning the implantable flow probe in a desired position with respect to the blood vessel and adjusting a size of the probe to achieve a close fit with the blood vessel to hold the flow probe in the desired position with respect to the blood vessel includes:

connecting the coupling member to the sensor housing to form a structure such that an outwardly facing surface of the coupling member is received by an inwardly facing surface of the sensor housing;

positioning the structure to partially encircle the blood vessel such that an inwardly facing surface of the coupling member closely fits with the exterior of the blood vessel; and

coupling a closure mechanism to the structure such that a combination of the structure and the closure mechanism encircles and closely fits with the exterior of the blood vessel.

45. (Previously Presented) An apparatus to position one or more sensors for use in measuring blood flow in a blood vessel, comprising:

a structure to hold the one or more sensors in an operable position to perform a blood flow measurement,

wherein the structure is configured for implantation, and the structure has an adjustable size for achieving a close fit with at least two different sized blood vessels such that the one or more sensors are held in a desired alignment with respect to the blood vessel during the blood flow measurement.

46. (Previously Presented) The apparatus of claim 45, wherein the structure is adapted to hold the one or more sensors in a desired alignment for a transit-time measurement.

47. (Previously Presented) The apparatus of claim 45, wherein the structure is adapted to hold the one or more sensors in a desired alignment for a flow velocity measurement.

48. (Previously Presented) The apparatus of claim 45, wherein the structure is adapted to hold the one or more sensors in a desired alignment for a volumetric fluid flow measurement.

49. (Previously Presented) The apparatus of claim 45, wherein the structure is adapted to hold the one or more sensors in a desired alignment for a pulse doppler measurement.

50. (Previously Presented) The apparatus of claim 45, wherein the structure is adapted to hold the one or more sensors in a desired alignment for a continuous wave doppler measurement.

51. (Previously Presented) The apparatus of claim 45, wherein the structure includes one or more sensor windows positioned with respect to the one or more sensors to allow sensor signals to pass through the windows with an acceptable amount of attenuation.

52. (Previously Presented) The apparatus of claim 51, wherein the one or more sensors includes one or more ultrasound transducers, and the one or more windows includes one or more acoustically transparent windows.

53. (Previously Presented) The apparatus of claim 45, wherein the structure has an adjustable size for achieving a close fit with an exterior of at least two different sized blood vessels.

54. (Previously Presented) The apparatus of claim 45, wherein the structure includes a sensor housing to hold the one or more sensors, the sensor housing having an inwardly facing surface to at least partially surround each of the at least two different sized blood vessels, the at least two different sized blood vessels including a first blood vessel and a second blood vessel, the apparatus further comprising:

a first coupling member having an outwardly facing surface to be received by the inwardly facing surface of the sensor housing, and further having an inwardly facing surface to at least partially surround and achieve a close fit with the first blood vessel; and

a second coupling member having an outwardly facing surface to be received by the inwardly facing surface of the sensor housing, and further having an inwardly facing surface to at least partially surround and achieve a close fit with the second blood vessel.

55. (Previously Presented) An apparatus to position one or more sensors for use in measuring blood flow in a blood vessel, comprising:

an implantable structure, including

a sensor housing to hold the one or more sensors in an operable position to perform a blood flow measurement; and

a coupling member to connect to the sensor housing for use to achieve a close fit with a blood vessel to hold the one or more sensors in a desired alignment with respect to the blood vessel during the blood flow measurement,

wherein the coupling member is selected from a set of at least a first coupling member and a second coupling member, the first coupling member is configured to connect to the sensor housing such that the implantable structure has a first configuration to achieve a close fit with a first blood vessel of a first size, and the second coupling member is configured to connect to the sensor housing such that the structure has a second configuration to achieve a close fit with a second blood vessel of a second size, the second size being different than the first size.

56. (Previously Presented) The apparatus of claim 55, wherein the coupling member is configured to connect to the sensor housing and achieve a close fit with an exterior surface of a blood vessel.

57. (Previously Presented) The apparatus of claim 56, wherein:
the coupling member has an inwardly facing surface to partially encircle the blood vessel and achieve a close fit with the exterior surface of the blood vessel, and further has an exterior surface; and

the sensor housing has an inwardly facing surface to partially encircle the blood vessel and to receive the exterior surface of the coupling member.